

FACT SHEET

This fact sheet is a companion document to the draft National Pollutant Discharge Elimination System (NPDES) Permit No. WA0040720. The Department of Ecology (Department) is proposing to reissue this permit, which will allow discharge of wastewater to waters of the state of Washington.

This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater and the regulatory and technical basis for those decisions. Public involvement information is contained in Appendix A.

GENERAL INFORMATION

<u>Applicant:</u>	SUPREME ALASKA SEAFOODS, INC. M/V Excellence, Official No. 967502 2600 Denali, Suite 300 Anchorage, AK 99503
<u>Permit No.:</u>	WA0040720
<u>Activity:</u>	Floating Seafood Processing
<u>Discharge Locations:</u>	Strait of Georgia, Strait of Juan de Fuca, and the Pacific Ocean Clallam, San Juan, and Whatcom Counties
<u>Receiving Water:</u>	Class AA marine surface water, Puget Sound Water Quality Plan Area Waterway Segment No. 08-02-01, 09-17-16, 09-18-15, 09-19-14, 10-21-17, 10-22-16, 27-00-01 Waterbody ID No. WA-01-0010, WA-02-0020, WA-18-0010 through WA-22-0010

The applicable receiving water quality standards are those adopted by the Washington State Department of Ecology and approved by the U.S. Environmental Protection Agency (EPA) Regional Administrator pursuant to Section 303 of the Clean Water Act.

The Strait of Juan de Fuca and Strait of Georgia are designated as Class AA [Washington Administrative Code (WAC) 173-201-085] marine surface water in the vicinity of operation and discharge. Characteristic uses include fish and shellfish: rearing, spawning, and harvesting; wildlife habitat; recreation; commerce; and navigation.

Compliance with permit conditions will not result in degradation of water quality standards or impair any beneficial uses.

Charts and descriptions of the proposed discharge areas can be found in Exhibits 1 and 2 of the draft permit.

BACKGROUND

M/V Excellence is a 367-foot floating seafood processor which proposes to seasonally conduct a mobile surimi and fish meal plant in specified marine waters of the state. The intended areas of operation are along the U.S./Canadian marine border and includes portions of the Strait of Juan de Fuca, Strait of Georgia, and the Pacific Ocean (see pages 8-10). The pollack and pacific whiting for this processor will come from Canadian catcher vessels that are participating in a seasonal fishery opening. Prior to any catch transfer, the M/V Excellence and the Canadian catcher vessels must anchor in pre-designated sites approved by the U.S. Customs service. Fish pumps will be utilized to transfer the catch to the processor. After the completion of a scheduled fish transfer operation, the M/V Excellence will proceed into the proposed operating area before processing. This vessel will maintain a speed of about nine knots when processing and will not process while at anchor or from shoreside.

The proposed maximum daily output is 90 metric tons of surimi. All wastewaters will be screened to remove solids larger than 1/4 inch. Screened fish wastes and scrap will be rendered to the fish meal plant which has an output of 25-30 metric tons of fish and bone meal. Anticipated wastewater discharge is in the range of two million gallons per day (excluding the desalinization reject water).

Potable water for processing and crew use is manufactured aboard this vessel. About one million gallons per day of saltwater is processed to yield about 150,000 gallons per day of fresh water.

This is a non-categorical industry. Effluent limitations were derived from EPA-issued NPDES permits for surimi processing operations in Alaska, Washington State Water Quality Standards, and the permit application. EPA has determined that similar projects will not result in significant adverse environmental impacts.

The current first NPDES permit for this activity was issued July 6, 1993 and expired July 6, 1998. That permit continues in effect, however, based on a "timely and sufficient reapplication" (as provided for by state law) until a permit decision is made on the reapplication.

WASTE SOURCES AND TREATMENT

The fish meal plant on board handles the processing waste. Fish oil is retrieved from the cooked fish and burned in a boiler.

The permit requires compliance with the following operational procedures:

All bailwater, washwater, transport water, and surimi process water must be screened to remove solids larger than 1/4-inch before discharge to surface waters. All solids removed by this screening must be routed to the fish meal plant for reduction. All fish waste generated in connection with the surimi process must be routed to the fish meal plant for reduction. Excess solids (to include waste and bones) not reduced in the fish meal process shall not be discharged to surface waters of the state.

All discharges of stickwater must be located at least 18 inches below the vessel's waterline, and the vessel must be moving between two to five knots when processing. The speed requirement was based on a study that found the range of ship velocity which prevented resurfacing of the underwater discharges from the action of the propeller.

Production guidelines specify that a residual chlorine concentration of one to three parts per million (ppm) be achieved in the non-process water prior to fish contact. This concentration exceeds the

receiving water standards of Chapter 173-201A WAC. Since no monitoring data of the actual residual chlorine level in the wastewater exists (this is a new discharger), total residual chlorine (TRC) monitoring is necessary. The amount of mixing in the receiving water cannot be predicted because of the unique nature of mixing presented by a mobile mechanically augmented diffuser. If this monitoring indicates that the potential exists for violation of the Water Quality Standards, the permit will be reopened to incorporate limits on TRC.

All sanitary wastes will be treated aboard ship and retained in a holding tank until properly disposed of according to Marpol Annex V regulations or at an authorized shore-based facility. (These and other discharges incidental to normal operation of a vessel are not subject to NPDES permitting requirements.)

BASIS FOR EFFLUENT LIMITATIONS

There are no limitations on mobile processors. As a Best Management Practice (BMP) to reduce pollutant discharges, the permit prohibits the grinding of wastes prior to screening. The applicant has proposed to screen the processing wastewater with ¼-inch screens and utilize the solids for fish meal production. Therefore, the permit includes limitations prohibiting the discharge of unscreened finfish wastes from these facilities. This permit contains no condition for emergency or temporary dumping in the event of breakdown or plant failure.

The limitations on the non-stickwater discharges from the fish meal plants are based on Best Professional Judgement (BPJ) and All Known Available and Reasonable Methods of Treatment (AKART). AKART was established by using the EPA limitations set forth in the Alaska NPDES permits. AKART is equivalent to Best Available Technology (BAT) for this permit.

The pollutants of concern in the discharge are oil and grease, Biochemical Oxygen Demand (BOD), chlorine, and Total Suspended Solids (TSS). There are no numeric state water quality standards for oil and grease or TSS. In accordance with Chapter 173-201(A), this permit prohibits the discharge of floating material or any material that will cause a visible sheen. There are no state water quality standards for BOD, but there are standards for dissolved oxygen. Since this is a far field effect, and this specific operation is moving between two to five knots, the high BOD discharge is not expected to violate those standards.

A. Fish Meal Processing:

There are no promulgated effluent guidelines for fish meal processing in Washington State. EPA has promulgated guidelines for stationary fish meal plants in the Gulf States and Atlantic Coast, and these limitations have been applied to some Alaskan plants in recent years. The guidelines are based on the use of technology to recycle the "stickwater" generated in the production of meal. Stickwater is the liquid fraction of fish waste that is pressed from the waste prior to entering the dryer. The stickwater contains most of the pollutants (BOD, TSS, and oil and grease) generated by the fish meal process.

Information submitted to EPA indicates that recycling of all solubles will result in an elevated salt content in the meal. The Alaskan fish meal plants have consequently proposed to discharge the excess stickwater. EPA has evaluated several options for treatment, disposal, and marketing of solubles in order to establish the Best Conventional Pollutant Control Technology (BCT) for the fish meal plant. At this time, treatment prior to discharge is not considered feasible, as is landfilling, incineration, and barging. EPA has determined that BCT for these facilities is the employment of in-plant processes (such as use of fresh water and/or dry conveyance to transport wastes) to reduce the salt content in the stickwater.

The flow limitations are based on application information.

B. Surimi Processing:

There are no EPA promulgated guidelines for surimi processing. Limitations on environmental effects and solids discharge are based on Washington State Water Quality Standards (Chapter 173-201 WAC), BCT, AKART, and federal Regulations of 40 Code of Federal Regulations (CFR) part 408.

All finfish wastes will be reduced to marketable product and leftover bone. In the application for this permit, Supreme Alaska Seafoods has proposed to screen the finfish processing wastewater and utilize the solids for fish meal production. Therefore, the permit includes limitations prohibiting the discharge of finfish wastes from this operation.

BASIS OF MONITORING

The permit standards set forth closely match those basic requirements adopted by EPA for at-sea processing activities but provides for adjustments based on variables such as location to sensitive areas, poorly flushing bays, and water quality limited areas.

Effluent monitoring is required pursuant to 40 CFR 122.44(i) and is necessary for determining compliance with permit effluent limitations and to evaluate potential water quality impacts resulting from the discharges. Monitoring frequencies are based on the Department's determination of the minimum sampling required to adequately monitor facility performance. Monitoring results will be reported in monthly Discharge Monitoring Reports (DMRs).

The Department has promulgated aquatic sediment standards (Chapter 173-204 WAC) to protect aquatic biota and human health. These standards state that the Department may require permittees to evaluate the potential for the discharge to cause a violation of applicable standards (WAC 173-204-400).

The Department has determined through a review of the discharger characteristics and effluent characteristics that this discharge has no potential for the discharge of substances that may cause a violation of the sediment management standards.

BEST MANAGEMENT PRACTICES

The Department is not requiring more efficient treatment than reduction to bone meal and screening of effluent. This has been determined to meet the BCT case-by-case determinations (40 CFR 122.3) by the EPA in their Alaskan surimi processing permits and along with other BMPs will be protective of state water quality standards and beneficial uses.

BMP controls have been established based on the EPA contract document, Reassessment of Effluent Limitations Guidelines and New Source Performance Standards for the Canned and Preserved Seafood Processing Point Source Category. These controls are designed to reduce the waste loadings through housekeeping measures and are directed toward optimization of water usage, minimization of contact between solids and water, and regular inspection of process and treatment units.

BMPs are required in the permit to ensure proper management practices become an integral part of daily operations in order to prevent accidental or unpermitted releases to waters of the state. The BMP plan

requires maintenance of all wastewater treatment systems, housekeeping measures directed toward optimization of water usage, minimization of contact between solids and water, and proper solid waste disposal.

There is no evidence that toxic substances other than chlorine are present in the effluent, therefore, toxic limits and monitoring requirements are not included in the permit. In place of toxicity testing, this permit requires reporting of all chemicals on the vessel, the amounts used, and the dates used.

HUMAN HEALTH PROTECTION

Toxic substances and pollutants that represent a human health threat are not expected to be discharged from this facility. Wastewater pretreatment, monitoring, and BMPs are expected to control conventional pollutants and protect human health. New information regarding human health or toxic relevant to this facility may cause reopening of this permit.

RECOMMENDATIONS

The following permit effluent limitations are proposed, based on the reapplication:

Stickwater

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Flow	0.003 mgd	0.004 mgd

Process Wastewaters

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Flow	0.15 mgd	0.2 mgd

Non-Process Wastewaters

<u>Parameter</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Flow	2.0 mgd	3.0 mgd

Monitoring results for stickwater shall be reported on the monthly DMR as both pollutant concentrations (mg/L) and loading values (lbs pollutant per 1000 lbs raw product).

There shall be no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.

MONITORING REQUIREMENTS

<u>Parameter</u>	<u>Frequency</u>	<u>Type</u>
Flow	Daily	Metered
Oil and Grease	Weekly	Grab
TSS	Weekly	Composite
Production	Daily	Calculated
Total Residual Chlorine	Weekly	Grab
BOD ₅	Yearly	Composite

Samples shall be taken in each effluent stream prior to mixing with any other wastewaters and before its discharge to the receiving water.

Based on the lack of historical information from this facility, flow sampling shall be daily, and reported monthly to the Department. Based on the information provided, temperature does not appear to be a threat to the environment.

SPECIAL CONDITIONS

A. Solid Waste Plan:

The Department has determined that the Permittee has the potential to pollute waters of the state from mishandling of solid waste leachate.

This permit requires, under authority of 90.48.080, that the Permittee develop a Solid Waste Plan to prevent solid waste from causing pollution of waters of the state. The Plan must be submitted to the local permitting agency for approval, if necessary, and to the Department.

One comprehensive plan, incorporating the Best Management Practices Plan, and Solid Waste Plans may be prepared and submitted to satisfy the individual plan submittal requirements.

This permit includes specific statements and a General Condition reopener statement allowing the Department to modify existing permit conditions and limitations or to establish new conditions or limitations based on monitoring results or other causes consistent with state and federal regulations.

This permit shall be reopened at any time the Department feels state water quality standards are being violated and/or adverse impacts to the environment exist and stricter limits, monitoring, or reporting requirements are necessary to protect those waters from environmental harm.

The proposed permit will expire in 5 years.